

INSTRUCTION MANUAL

EXT-ANT2

Planar Diversity Antenna

Thank you for purchasing KYOWA's product EXT-ANT2 Planer Diversity Antenna.
Read this Instruction Manual carefully in order to make full use of the high performance capabilities of the product. Do not use the product in methods other than described in this Manual.

● STANDARD ACCESSORIES

The following accessories are packed with EXT-ANT2.

When unpacking, check the contents to ensure that all accessories are enclosed.

Adhesive sheet

1

● SAFETY PRECAUTIONS(Do not forget to read the safety precautions prior to use.)

PRIOR TO USE

For safe use of the product, do not forget to read the "Safety Precautions" prior to use.
KYOWA assumes no liability for any damage resulting from the user's failure to comply with the safety precautions.

SAFETY SYMBOLS

For safety operation of the product, the following symbol marks are used in the Instruction Manual.



CAUTION

Improper operation of the system may result in injury of the operator and physical damage of the system.



CAUTION

- Use the product for the MRS-100 series Digital Telemeters which complies with the Radio Laws of Japan, India, Thailand, the United States and the European Union.
Do not use the product to other transceiver units.
Use the product in Japan, the United States and India.
- Use the product within temperature ranging from 0 to +50°C.
Use at temperatures exceeding the specified range may lower the performance and cause trouble.
If use under direct sunlight or in a cold place is inevitable, prepare a sunscreen or take proper measures to keep it warm.
- Use the product in the specified operating humidity of 20 to 85% .
Use in a humid place exceeding the specified range or where it is exposed to splashing water may lower the performance and cause trouble.
- Do not use the product immediately when the ambient temperature and humidity change suddenly.
Leave the product as it is until it becomes adaptable to the environment.
Abrupt change in ambient temperature due to transportation, etc. may cause dew condensation, which may result in lower performance and troubles.
- Use the product under environment without excessive vibration or high impact.
Use the product in an area where vibration and impact can be kept within the scope of specifications.
Continuous vibration or severe impact may cause deteriorated performance and system failure.
- This product operates on the 2.4 GHz band, which wireless LAN, Bluetooth®, and microwave ovens also use.
Devices on the wireless LAN or on other radio waves may generate electromagnetic interference that causes wireless communication errors in this product.
Before using this product, check to confirm that there are no such devices nearby.

- Do not pull cables.
Lay cords and cables with a certain allowance so that unreasonable force is not applied to the connections.
Or, it may interrupt the measurements, break the cables, and damage the connectors.
- Use the product under the descriptions of the instruction manual to avoid its malfunctions.

● OUTLINE OF PRODUCT

◆ OUTLINE

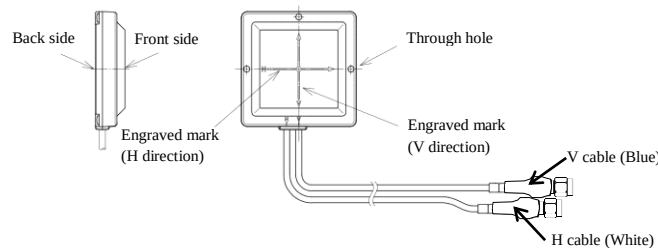
EXT-ANT2 [Planar diversity antenna]

- This single antenna has two orthogonal polarizations—vertical polarization (V-pol.) and horizontal polarization (H-pol.) for the polarization diversity technique.

◆ FEATURES

- Enable reception even if the polarization changes.
- Miniaturized, low profile and suited antenna to embedded equipments.
- The back side of EXT-ANT2 is uninfluenced to structural objects, thus, it can be directly put on walls, etc.
- Splashproof structure for outdoor installation.

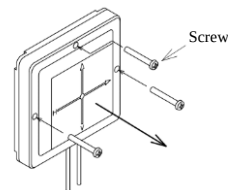
● NAME OF PARTS



V cable (Blue) : Connected to the vertical polarization antenna.
H cable (White) : Connected to the horizontal polarization antenna.

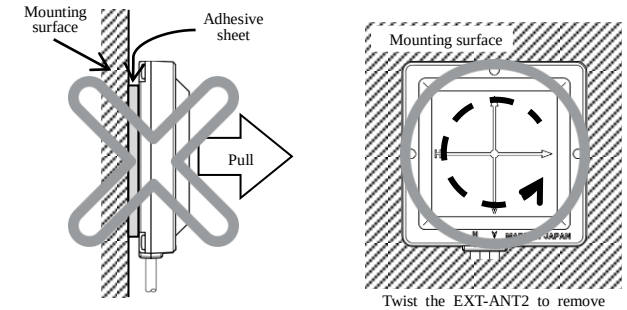
● INSTALLATION METHOD

- EXT-ANT2 has high directivity toward the front where the arrows are engraved.
Adjust the front side of AXT-ANT2 to the transmitter.
- Install the transmitting and receiving antennas that account for radiation and polarization characteristics as described for full performance by the antennas and reliable radio communication.
- Lay down the cables to a downward direction.
- Use the screw with a tightening torque of 3kgf·cm in the case of installing EXT-ANT2 by threads of M2.6 ~ M3.0.
- Using and make adhere the included adhesive sheet, the EXT-ANT2 can be installed at appropriate locations after removing the protection sheet of its sheet and putting it on the back side of EXT-ANT2.
Can repeatedly use the included adhesive sheet by washing the included it with water and dried.



● METHOD OF DEMOUNTING EXT-ANT2 IN USING AGHESIVE SHEET

The included adhesive sheet can be easily removed from mounting surfaces by turing the EXT-ANT2 as follows.



● CONNECTION

- Connect the V cable (Blue) and the H cable (White) of EXT-ANT2 to "MAIN" and "SUB" on the receiver, respectively.
- The V cable (Blue) and H cable (White) of EXT-ANT2 can be connected to eather connectors: ANTENNA "MAIN" or "SUB".

● CINSTALLATION CAUTION

- Radio waves in the 2.4GHz band have high straightness, so the waves are less likely able to maneuver around obstacles. For this reason, install the transmitting and receiving antennas so that each antenna is visible from the position of the other. If the transmitter or receiver is installed in a place that moves, ensure that the transmitting and receiving antennas are mutually visible throughout the path of movement.
- This product is the drip-proof equipment which can be installed outside. It is recommended to set the product in a protecting case to avoid the antenna performance degradation by waterdrop. The connectors of antenna cables are not drip-proof. Need to take connectors watertight, if the product is installed outside.

● PRODUCT SPECIFICATION

- Antenna type : Clooss Diversity Antenna with orthogonal polarization (EXT-ANT2)
- Operated Range : 2400MHz ~ 2497MHz
- Antenna gain : 1.95dBi
- Allowable Input Power : 0.5W
- Connector : SMA-P(Reverced type)
- Body Structure : Drip-proof structure(JIS D0203 S1)
- Compliance : Concentrations of the 6 restricted substances designated in RoHS Directive are less than the maximum allowable (excluding exceptions for applying usage prohibition).

● OUTLINE DRAWING

